AD-A167 463 NAVAL AIR STATION SIGONELLA (AUGUSTA BAY) FLEET MOORING 1/1
UNDERWATER INSPECTION PLAN(U) NAVAL FACILITIES
ENGINEERING COMMAND WASHINGTON DC CHESAPEAKE... JUL 83
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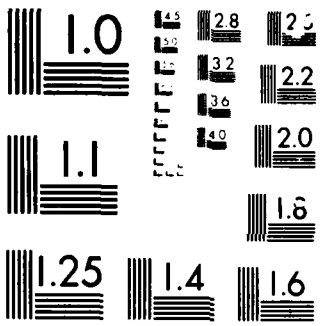

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NAVAL AIR STATION SIGONELLA (AUGUSTA BAY) FLEET MOORING UNDERWATER INSPECTION PLAN

JULY 1983

OCEAN ENGINEERING
AND CONSTRUCTION PROJECT OFFICE
CHESAPEAKE DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
WASHINGTON, D.C. 20374

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As part of COMNAVFACENGCOM's Fleet Mooring Maintenance (FFM) Program, CHESNAVFACENGCOM has been assigned the responsibility to conduct the underwater inspections of fleet moorings worldwide. This plan provides guidelines for the underwater inspection of the fleet mooring operated (Con't)

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and maintained by the Naval Air Station (NAS), Sigonella, Sicily. The inspection is scheduled to take place in September 1983.

CHESNAVFACENGCOM has designated an Engineer-in-Charge (EIC) to provide on-site technical guidance to Underwater Construction Team One (UCT ONE) who will perform the underwater portion of the inspection. In addition, the EIC will prepare the post inspection report which will include the results of the inspection and recommendations for required maintenance actions.

TABLE OF CONTENTS

NAVAL AIR STATION SIGONELLA
UNDERWATER FLEET MOORING INSPECTION PLAN

1.0 BACKGROUND

As part of COMNAVFACENGCOM's Fleet Mooring Maintenance (FMM) Program, CHESNAVFACENGCOM has been assigned the responsibility to conduct the underwater inspections of fleet moorings worldwide. This plan provides guidelines for the underwater inspection of the fleet mooring operated and maintained by the Naval Air Station (NAS), Sigonella, Sicily. The inspection is scheduled to take place in September 1983.

CHESNAVFACENGCOM has designated an Engineer-in-Charge (EIC) to provide on-site technical guidance to Underwater Construction Team One (UCT ONE) who will perform the underwater portion of the inspection. In addition, the EIC will prepare the post inspection report which will include the results of the inspection and recommendations for required maintenance actions.

2.0 PROJECT RESPONSIBILITIES

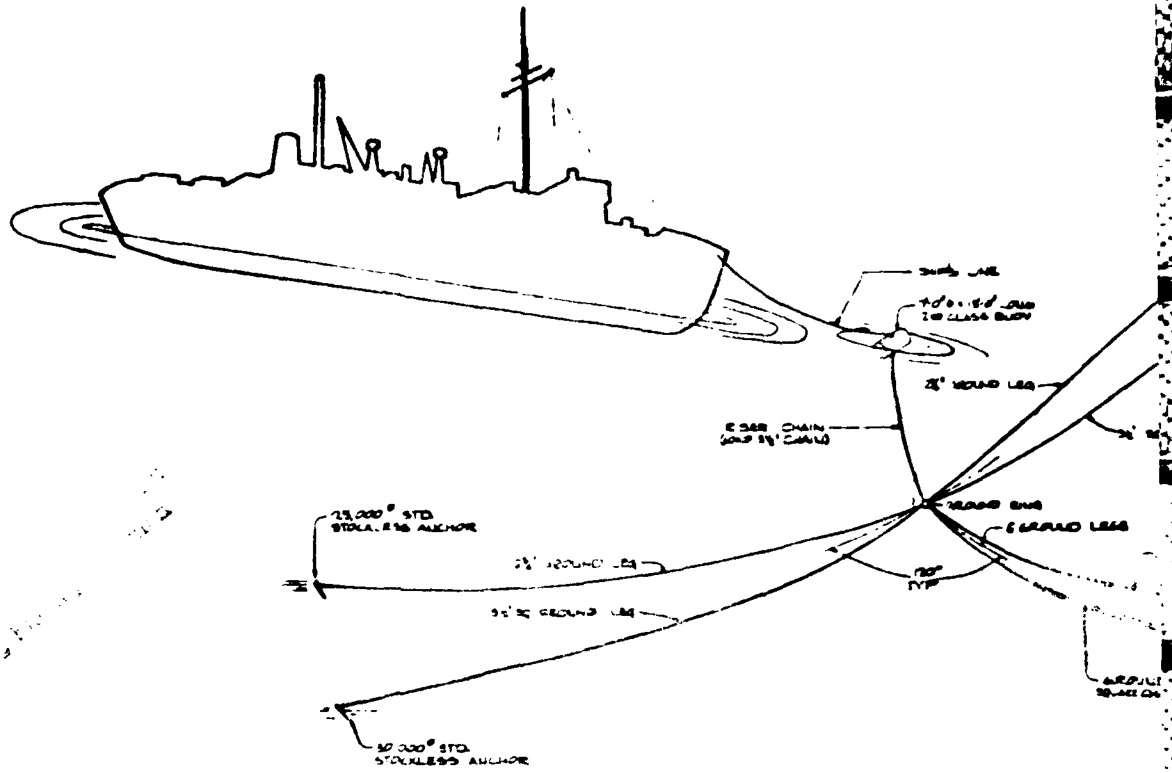
CHESNAVFACENGCOM will develop the FM underwater insepction plan, provide technical assistance to the dive team, prepare the required inspection forms, evaluate the observed inspection data, and report and results of the inspection to interested activities.

UCT ONE will provide divers to accomplish the inspection within the allotted time frame, gather and accurately report all required data, and ensure that the required amount of diving support material/equipment is available. In addition, UCT ONE divers will perform the underwater inspection in accordance with this plan and collect the data specified in paragraph 4.0.

The activity responsible for the moorings being inspected will provide logistic support as required by the Engineer-in-Charge and the UCT dive team.

3.0 GENERAL MOORING HISTORY

NAS Sigonella currently operates and maintains a Class CC Fleet Mooring located in Augusta Bay, Sicily. This mooring is installed in about 75 feet of water and was last overhauled in October 1980. Figure 1 is a schematic drawing of the mooring, including its relative geographic position, while Figure 2



MOORING SCHEMATIC

NOT TO SCALE

DESIGN CRITERIA

[illegible] CONDITIONS

- WIND — 65 KNOTS
- CURRENT — [illegible] KNOTS
- WAVE — [illegible] FEET
- TIDE — 1 FOOT
- BOTTOM — SOFT CLAYEY SILT [illegible] METERS DEEP ABOVE A LAYER OF SANDY CLAY
- WATER DEPTH — [illegible] FEET

DESIGN ASSUMPTIONS

THE MOORING WAS DESIGNED TO ACCOMMODATE A TENDER (PUGET SOUND, AD-38) WITH A CAN MOORED ALONG SIDE

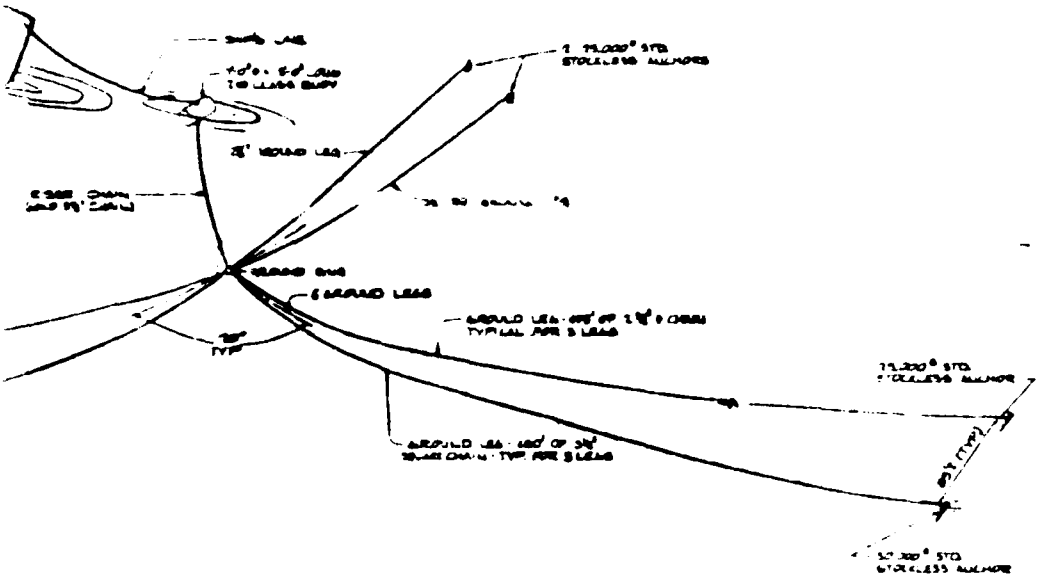
NOTE

[illegible] CROSS SECTION RECTANGULAR LINK [illegible] AND THE ASSOCIATED JOINING SHACKLES [illegible] FROM SURPLUS ARE NOT OF AMERICAN MANUFACTURE. BECAUSE ENOUGH DETAILED INFORMATION WAS NOT AVAILABLE, AN ACCURATE DETERMINATION OF THE EXACT [illegible] STRENGTH OF THESE ITEMS WAS NOT POSSIBLE. HOWEVER, BY COMPARING THE CROSS SECTIONAL AREAS OF THE SQUARE LINK CHAIN [illegible] THE STANDARD GROUND CHAIN [illegible] IT WOULD APPEAR THAT ADEQUATE STRENGTH IS AVAILABLE. THIS STRENGTH [illegible] MANUFACTURERS LITERATURE.

NOTE

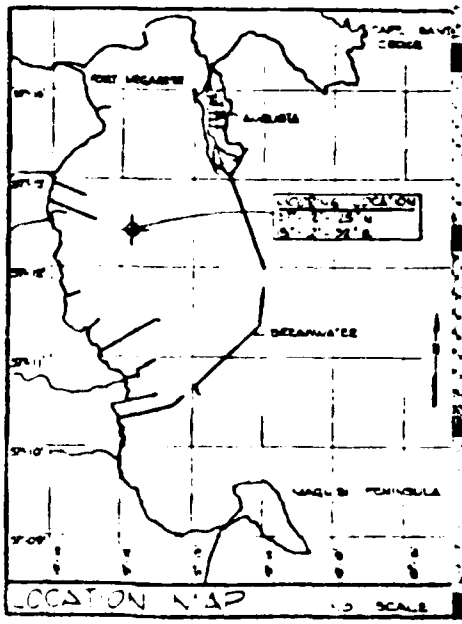
THE [illegible] SELECTED IS BASED ON A STANDARD [illegible] FORCE OF [illegible] [illegible] BUOY.

1. THE [illegible] RISER CHAIN, [illegible] [illegible] NAVY [illegible] LOCATED AT [illegible] ITALY [illegible]



SCHEMATIC

VICINITY MAP NO SCALE



LOCATION MAP NO SCALE

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ATLANTIC DIVISION

AUGUSTA BAY

FIGURE 1. AUGUSTA BAY FLEET MOOR

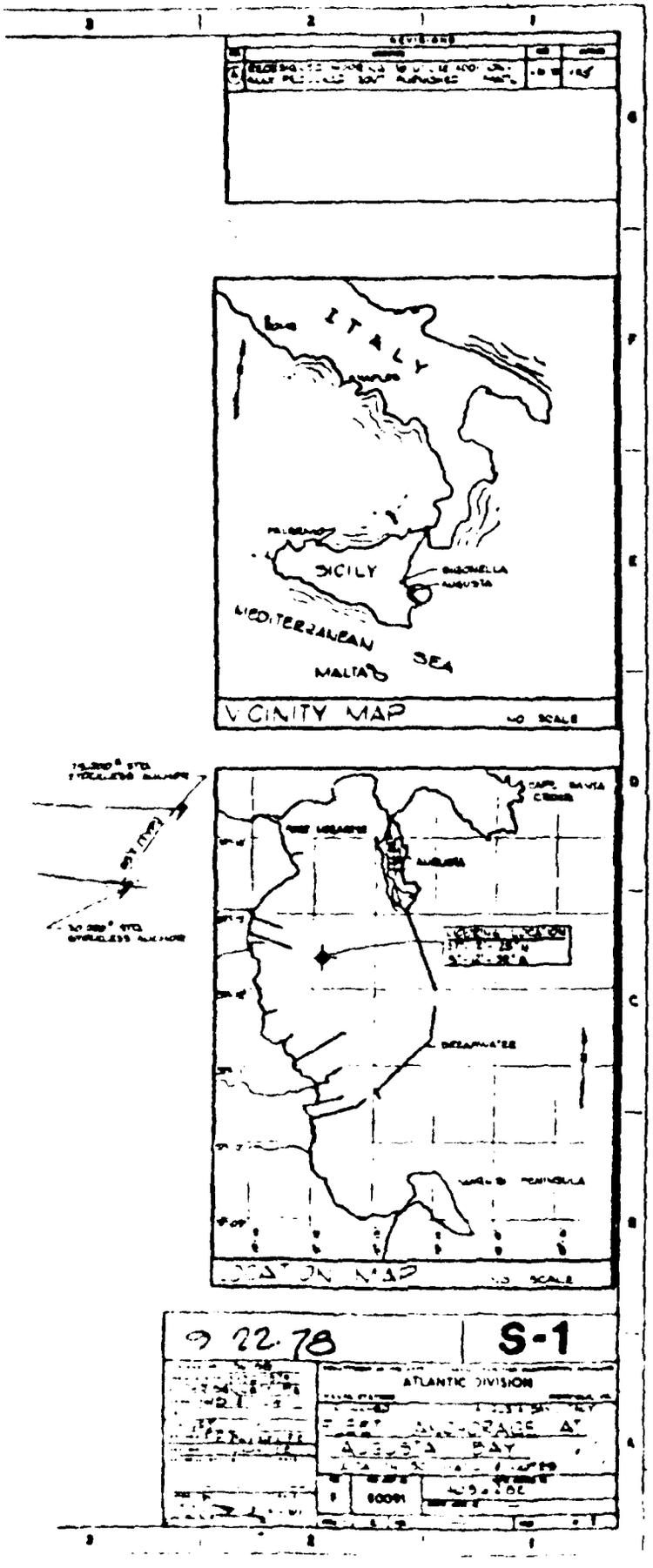
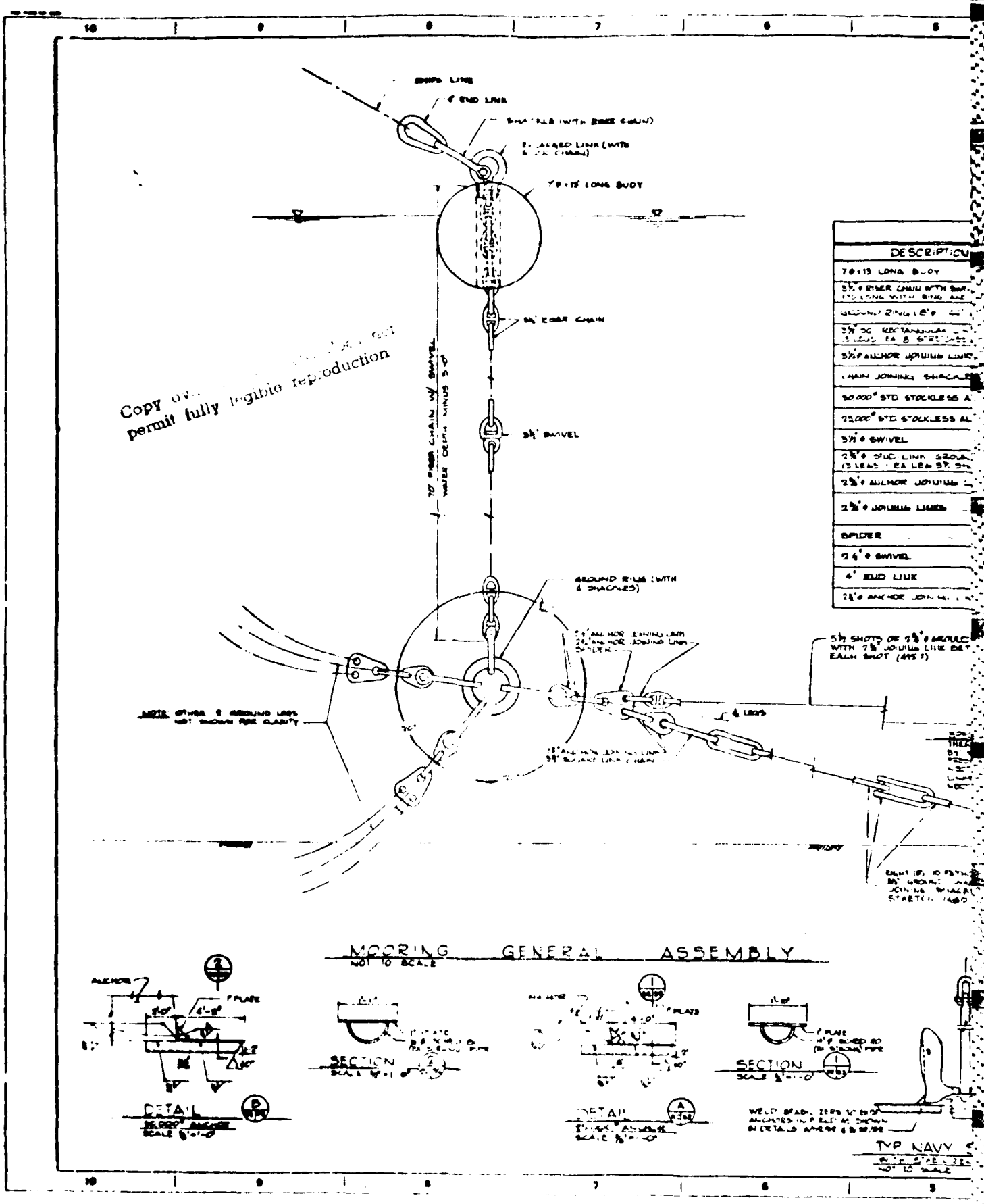


FIGURE 1 AUGUSTA BAY FLEET MOORING



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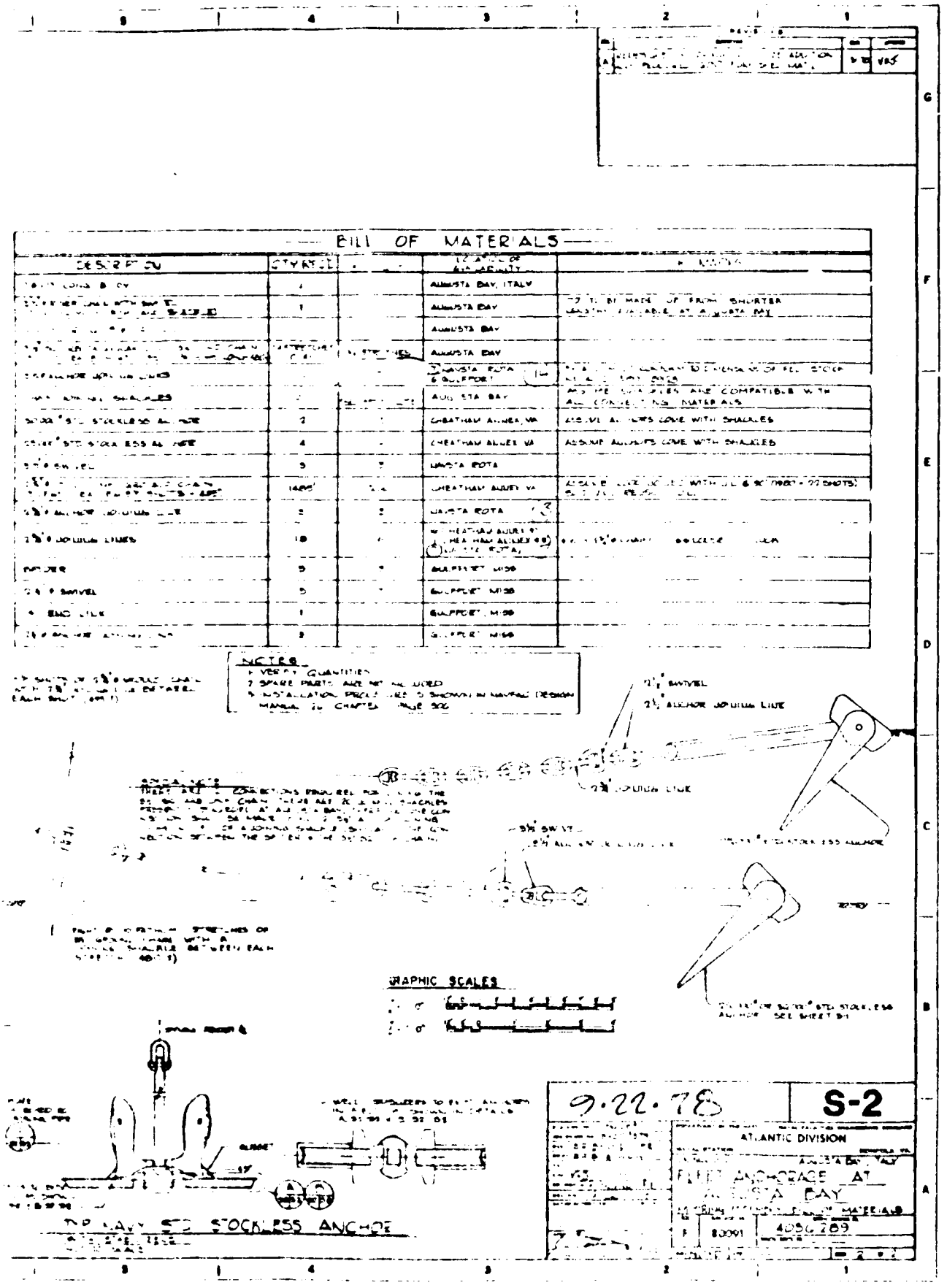


FIGURE 2 AUGUSTA BAY MOORING AS BUILT

depicts the as-built configuration of the mooring. The mooring consists of a 13-foot-long by 7-foot diameter 2nd class buoy, a 3-1/2 inch riser, a ground ring, three double legs and six 25,000-pound standard stockless anchors. Each double ground leg configuration contains a spider plate, one leg of 5 1/2 shots (495 feet) of 2-3/4 inch chain leading to an anchor, and a second ground leg consisting of 480 feet of 3-1/2 inch square link chain leading to a second anchor.

4.0 INSPECTION PROCEDURES

4.1 Inspection Objectives. The purpose of this mooring inspection is to determine the general physical condition of the buoy and chain assembly and, when possible, to verify or update existing as-built and maintenance records. Divers will inspect only a portion of the submerged buoy hull and chain assembly in order to compile a general description of the mooring's condition. The existence of fairly consistent measurements during this inspection provides a good indication of the mooring's overall condition. It should be kept in mind that periodic underwater inspections are intended as an expedient and relatively inexpensive supplement to accurate maintenance records. As such, they cannot fully substitute for a complete inspection involving recovery of the mooring and the measurement and evaluation of each component.

One of the more important parameters used to evaluate the condition of a mooring is chain wire diameter. After the chain is cleaned to bare metal, a selective sampling of the wire diameter of chain links and connecting hardware is taken in order to determine the amount of deterioration due to corrosion and wear. "Single link" measurements are taken where chain is slack, and detect only corrosion loss. "Double link" measurements, taken where two links connect under tension, detect the combined effects of corrosion and wear. Chain links and other components which measure 90 percent or greater of original wire diameter are considered to be in "good" condition; measurement between 80 percent and 90 percent of original diameter is considered "fair" condition and is cause for the mooring to be downgraded in classification; any measurement less than 80 percent is considered "poor" and is cause for the mooring to be declared unsatisfactory for fleet use. Figure A-1 in Annex A depicts the proper method of taking both single and double link measurements.

Standard underwater inspection procedures do not call for the inspection of any part of a mooring which is buried. Ground legs and risers are observed only to the point at which they become buried; no attempt is made to locate and inspect anchors or other mooring materials which are not readily visible.

The following paragraphs contain the general inspection procedures that will be followed. Inspection check lists are contained in Annex B.

4.2 Buoy. The geographic position of the buoy will be verified. In order to accomplish this, a transit will be used to sight the buoy from known positions ashore.

4.2.1 Buoy Upper Portion. The buoy shall be observed to determine its general condition. The size of the buoy (diameter and height) should be recorded along with its freeboard. Physical damage such as holes, dents, or listing shall be described. The paint will be checked for cracking, chipping, and peeling. Hatches, openings, and penetrations will be examined and broken parts and rust will be reported.

The buoy fenders and rubbing rails shall be checked for integrity and secure connection to the buoy.

Buoy top jewelry shall be identified and measured with calipers to find the overall outside dimensions and areas of most severe reduction in wire size. Methods for presetting calipers are contained in Annex A.

4.2.2 Buoy Lower Portion. Divers shall thoroughly inspect the buoy below the waterline. The thickness of marine growth shall be recorded, three one-foot-square areas shall be selected and cleared of growth without damaging the paint and the condition of the paint will be noted.

4.2.3 Bottom Jewelry. The jewelry connecting the buoy to the riser shall be identified and measured with calipers. As with the topside jewelry, the overall dimensions and the smallest wire size of each type of link or shackle will be recorded.

4.3 Riser. Three consecutive double link measurements using pre-cut gauges will be made at both ends and near the center of the riser. Procedures for the use of pre-cut gauges are contained in Annex A. The swivel and detachable links contained within the riser assembly shall be visually inspected and measured. As the divers swim down the riser, all chain links and other mooring hardware will be visually observed. Material suspected to be in worn or damaged condition will be investigated.

4.4 Ground Ring. The ground ring shall be examined for general and localized wear. Caliper measurements shall be made of both the wire size in the region of most severe wear and across the inner diameter.

4.5 Ground Legs. Three consecutive double link measurements of each ground leg shall be taken every 20 feet. In those cases where the ground leg chain is slack and not in tension, three single link measurements shall be taken of each selected link as shown in Figure A-1 (Annex A). Even though the grip areas are rounded, the go/no-go guages may not be able to be used for the measurement of square chain. In this event, calipers will be used for taking measurements. All connecting hardware including

detachable links, anchor joining links, pear links, end links, swivels and shackles shall be identified and measured with calipers. Worn hardware and unusual chain joining practices shall be recorded and photographed.

The legs shall be labeled A, B, and C clockwise from magnetic north and their orientation (determined by the diver's compass) sketched as in Figure 3.

4.6 Anchors. If an anchor is located, a pop float shall be attached to it so that the relative positions of the anchor from the mooring buoy can be observed from the surface. The anchor's position shall be recorded. The hardware connecting an anchor to its ground leg will be measured by calipers and the wire diameters recorded.

4.7 Photography

4.7.1 Topside. Topside photography and ashore photographs are the responsibility of the Engineer-in-Charge. Film for standard size slide transparencies should be used.

Photographs will be taken of the buoy showing its general condition. Photographs of the topside jewelry and damaged buoy components will be taken as deemed appropriate by the EIC.

Photographs will be taken of ashore spare mooring material inventories and construction equipment as deemed necessary.

4.7.2 Underwater. Underwater photography shall be the responsibility of the dive team. The buoy bottom, bottom jewelry, worn links, swivels, ground rings, and other hardware shall be photographed wherever required to support material conditions and when environmentally feasible. Photographs shall include clear annotation as to the location of the hardware being photographed. High speed film (i.e. ASA 400) for standard size slide transparencies should be used. Because silt and other particles suspended in the water tend to reduce picture quality when illuminated, the flash should be used only when absolutely necessary to provide adequate light levels.

5.0 DOCUMENTATION

The Engineer-in-Charge will document the inspection procedures used and record the data obtained by the dive team. He may require additional or alternative inspection procedures as deemed necessary during the course of the inspection. He will maintain a time log of events occurring during the

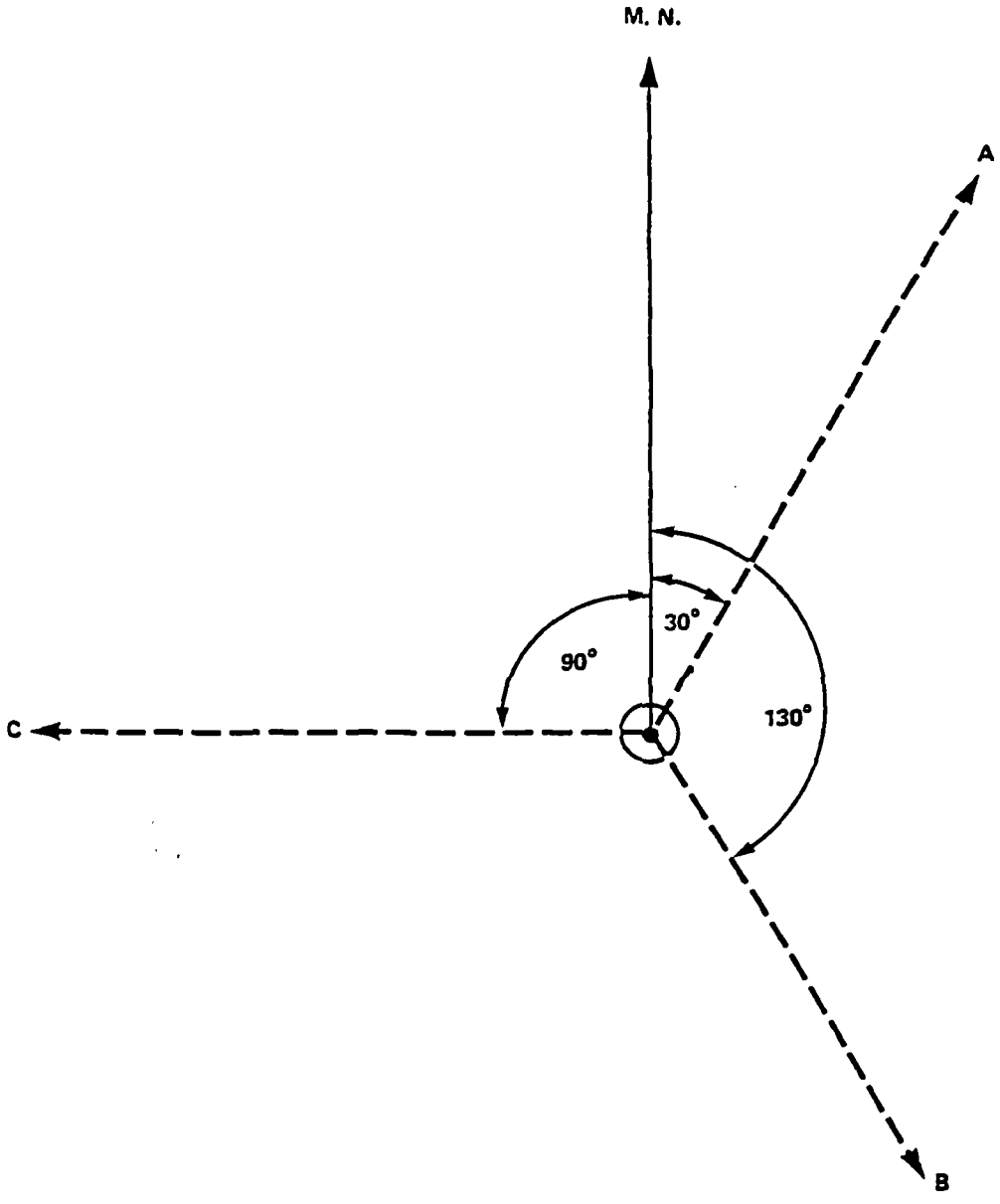


FIGURE 3. MAGNETIC BEARING OF GROUND LEGS

inspection, and the master inspection form. In addition, the EIC must be prepared to debrief each diver, upon his return to the surface, in order to gain immediate knowledge of what the diver observed. The information obtained from the divers will be recorded, and this data will subsequently be the basis for the development of the moorings as-built configuration and for the preparation of the Fleet Mooring Inspection Report, which will contain the results of the inspection and recommendations for corrective maintenance actions.

While on site, the EIC will investigate the availability and cost of local mooring maintenance support. In addition he will conduct a cursory inspection of any on-shore Fleet Mooring Inventory (FMI) used for maintenance and repair or ready reserve. The type, size, quantity and general condition of the inventory shall be reported.

6.0 MEETINGS/BRIEFINGS

Upon arrival on site, the Engineer-in-Charge will conduct a pre-dive briefing to familiarize diving personnel with the mooring inspection procedures and to advise them of possible modifications to this inspection plan. In addition, after approval by CHESDIV, the EIC will give a post-inspection debriefing to advise station personnel of the preliminary inspection findings.

7.0 LOGISTICS

7.1 UCT ONE. All arrangements for messing, berthing, and transportation of diver personnel, and the acquisition of a suitable dive platform/boat, will be the responsibility of UCT 1. In addition, the following equipment will be provided by the divers in support of this inspection:

- All diving support equipment
- Measuring aids
  - 100-foot tape measures for use underwater
  - 1-, 2-, and 3-foot scales with large numbers suitable for underwater photo documentation
  - Accurate depth gauges
  - Marker tags to relocate or mark chain links or accessories
  - Calipers (24-inch minimum)
  - Go/no-go gauges
  - White slates (2) w/marker pens for underwater use

- Survey equipment

  - Compass (diver's)
  - Survey buoys with line (pop floats)
  - Surveying transits for establishing mooring buoy locations

- Underwater voltmeters

- Two Underwater still cameras (35mm) with film (color and B & W) and flash with spare batteries

- Cleaning equipment – Hand tools including wire brushes, chipping hammers, and sharp chisels.

7.2 **CHESNAVFACENGCOM.** The CHESNAVFACENGCOM Engineer-in-Charge will provide the following:

- Inspection plan
- Data sheets and forms
- 35mm surface camera and film
- Drafting supplies, graph paper, scales
- Calculator
- Pre-dive briefing data
- DM-26

ANNEX A

MEASURING DEVICES AND THEIR USE

ANNEX A

1.0 MEASURING DEVICES AND THEIR USE

Tables A-1 and A-2 outline the 80 and 90 percent measurements for mooring components. These tables are based on the standard sizes of mooring material listed in DM-26 and can be used to preset calipers before measuring various items. For example, a class BB riser type mooring will require calipers set to 3.15 inches (90 percent) and 2.8 inches (80 percent) for single link measurements on the riser. These values are then doubled obtaining 6.3 inches (90 percent) and 5.6 inches (80 percent) for double link measurements on the riser. Similarly, for the ground legs, single link measurements of 2.25 inches (90 percent) and 2.0 inches (80 percent) are obtained from Table A-1. These values are also doubled to obtain 4.5 inches and 4.0 inches for double link measurements. For the ground ring the single link measurements are determined to be 5.85 inches and 5.2 inches.

The preferred measuring devices, however, are back-to-back 80 and 90 percent "go-no go" gauges. These gauges simplify the diver's job in that, unlike calipers, they have to be damaged to be knocked out of adjustment. The locations for measuring chain links are shown in Figure A-1. Figure A-2 contains the drawings and data required to fabricate these gauges. Although these gauges provide a simpler way of sampling the wire size of chain links and some jewelry, the divers still have to carry calipers to measure ground rings and chain connecting links.

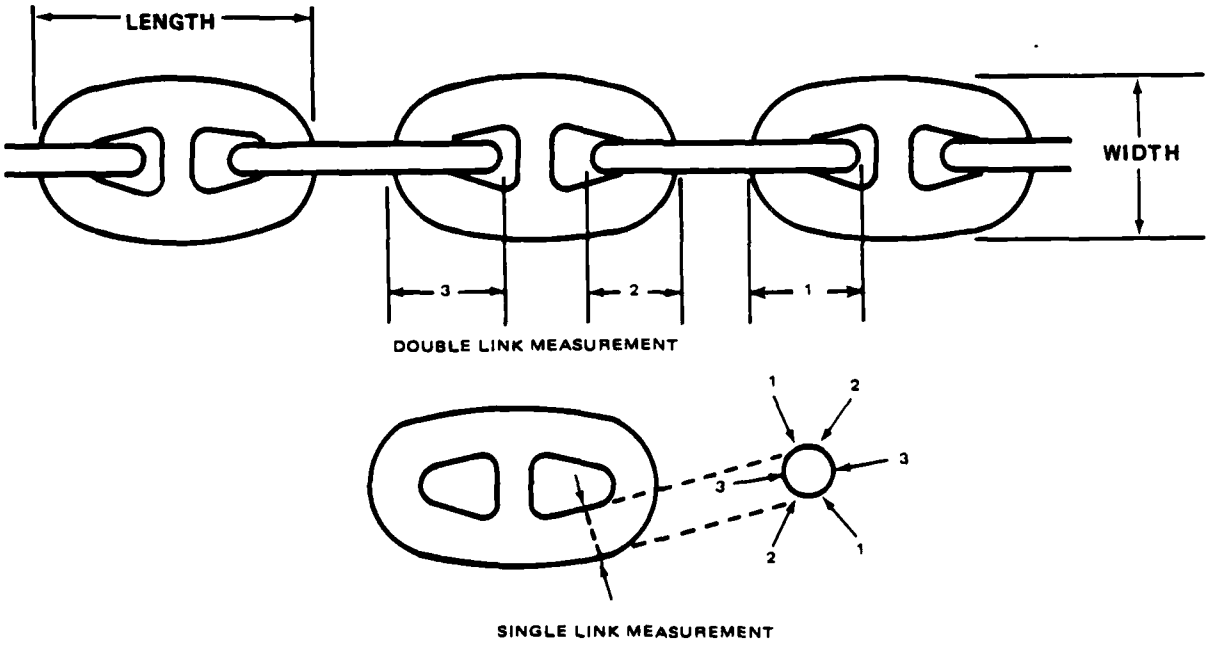


FIGURE A-1. LOCATIONS FOR TAKING CHAIN LINK MEASUREMENTS

TABLE A-1. SINGLE LINK MEASUREMENTS FOR COMPONENTS OF RISER-TYPE MOORINGS
(DOUBLE LINK MEASUREMENTS ARE OBTAINED BY MULTIPLYING SINGLE LINK MEASUREMENTS BY TWO)

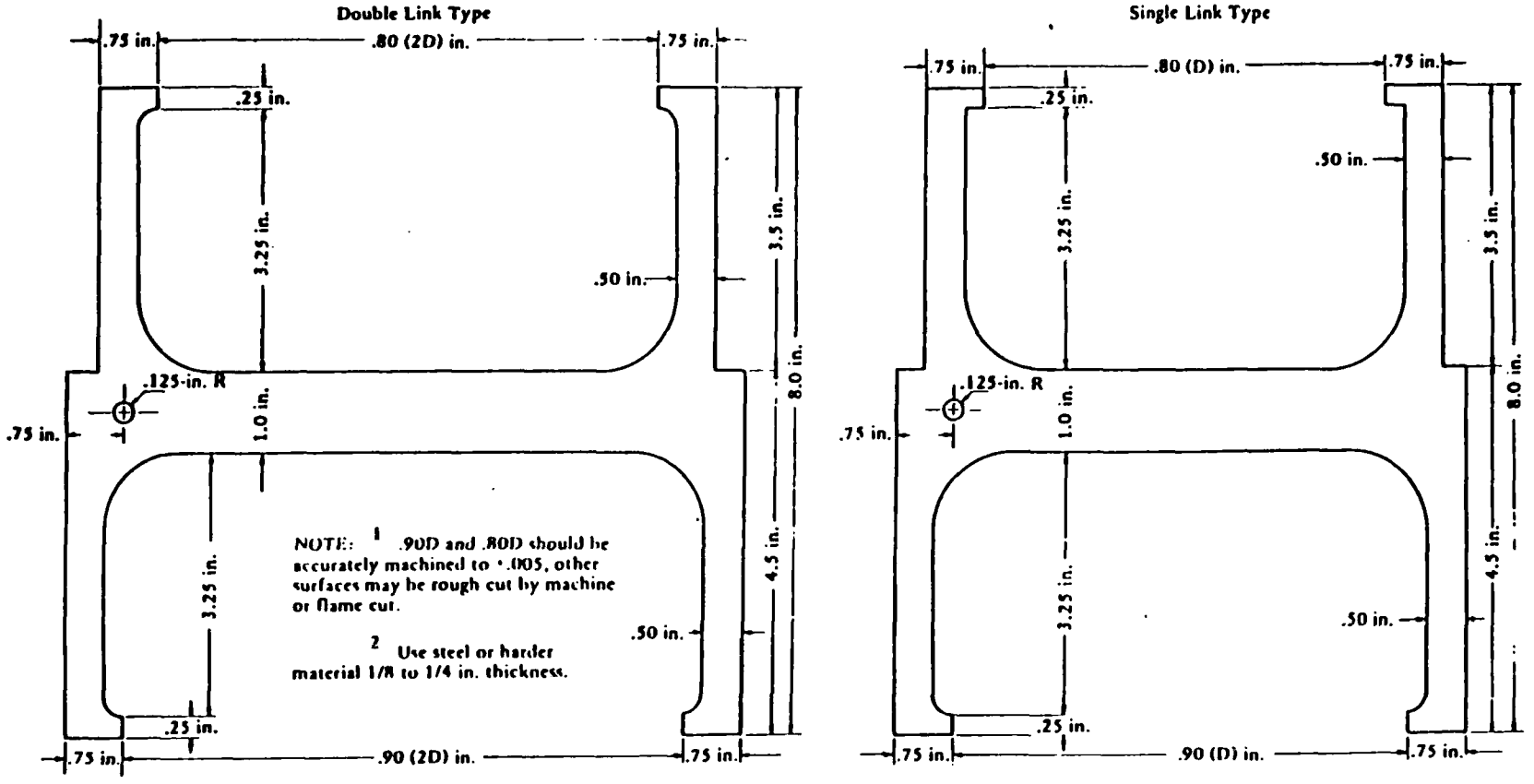
Class Mooring	Percent Remaining	Top of Buoy			Riser Chain	Ground Ring			Ground Tackle		Anchor[2]	
		F-Shackle	End Link	AJL[1]		AJL[1]	Ring	Spider	Chain	AJL[1]	Stockless w/Stabilizer	LWT
A-A	100	5 3/8	4¼	4"	4	4"	6½	4 3	2 3/4	2 3/4"		
	90	4.838	3.285	type	3.6	type	5.85	3.6 2.7	2.475	type	25,000	-
	80	4.3	2.92		3.2		5.2	3.2 2.4	2.2			
B-B	100	4 15/16	3 15/16	3½"	3½	3½"	6½	4 3	2½	2½"		
	90	4.44	3.544	type	3.15	type	5.85	3.6 2.7	2.25	type	20,000	13,000
	80	3.75	3.15		2.8		5.2	3.2 2.4	2.0			
C-C	100	4 15/16	3 15/16	3½"	3½	3½"	6½	4 3	2¼	2¼"		
	90	4.44	3.544	type	3.15	type	5.85	3.6 2.7	2.025	type	18,000	10,000
	80	3.95	3.15		2.8		5.2	3.2 2.4	1.8			
D-D	100	4 3/16	3 3/4	3"	3	3"	6		3	3"		
	90	3.769	3.375	type	2.7	type	5.4	-	2.7	type	30,000	-
	80	3.35	3		2.4		4.8		2.4			
A	100	3 7/8	3 3/8	2 3/4"	2 3/4	2 3/4"	5½		2 3/4	2 3/4"		
	90	3.488	3.038	type	2.475	type	4.95	-	2.475	type	25,000	-
	80	3.1	2.7		2.2		4.4		2.2			
B	100	3½	3 1/8	2½"	2½	2½"	4 3/4		2½	2½"		
	90	3.15	2.813	type	2.25	type	4.275	-	2.25	type	20,000	13,000
	80	2.8	2.5		2.0		3.8					
C	100	3 1/8	2 3/4	2¼"	2¼	2¼"	4½		2¼	2¼"		
	90	2.813	2.813	type	2.025	type	4.05	-	2.025	type	10,000	10,000
	80	2.5	2.5		1.8		3.6	-	1.8			
D	100	2 13/16	2½	2"	2	2"	4		2	2"		
	90	2.531	2.25	type	1.8	type	3.6		1.8	type	13,000	6,000
	80	2.25	2.0		1.6		3.2		1.6			
E	100	2 7/16	2¼	1 3/4"	1 3/4	1 3/4"	3½		1 3/4	1 3/4"		
	90	2.174	2.025	type	1.575	type	3 15	-	1.575	type	9,000	4,000
	80	1.95	1.8		1.4		2.8		1.4			
F	100	1 3/4	1 3/4	1½"	1¼	1½"	2 3/4		1¼	1½"		
	90	1.575	1.575	type	1.125	type	2.813	-	1.125	type	5,000	2,000
	80	1.4	1.4		1.0		2.5		1.0			
G	100	1 1/16	.1	3/4"	3/4	3/4"	1 7/8		3/4	1"		
	90	.956	.9	type	.675	type	1.688	-	.675	type	3,000	300
	80	.85	.8		.6		1.5		.6			

1. AJL measurement vary according to manufacturer, see DM-26
2. Assumes firm sand bottom
3. Assumes cast steel chain

TABLE A-2. SINGLE LINK MEASUREMENTS FOR COMPONENTS OF TELEPHONE-TYPE MOORINGS (DOUBLE LINK MEASUREMENTS ARE OBTAINED BY MULTIPLYING SINGLE LINK MEASUREMENTS BY TWO)

Class Mooring	Percent Remaining	Top of Buoy		Buoy-to-Ground Tackle			Ground Tackle		Anchor [2]	
		End Link	A.H. [1]	D/F-Shackle	A.H. [1]	Spider	A.H. [1]	Chain	Stockless/Stabilizer	LWT
A-A	100	4½	4"	4 11/16	4"	4 3	2 3/4"	2 3/4		
	90	3.285	type	4.219	type	3.6 2.7	type	2.475	25,000	-
	80	2.92		3.75		3.2 2.4		2.2		
B-B	100	4½	4"	4 11/16	3½"	4 3	2½"	2½		
	90	3.285	type	4.219	type	3.6 2.7	type	2.25	20,000	13,000
	80	2.92		3.75		3.2 2.4		2.0		
C-C	100	4½	4"	4 11/16	3½"	4 3	2½"	2½		
	90	3.285	type	4.219	type	3.6 2.7	type	2.025	18,000	10,000
	80	2.92		3.75		3.2 2.4		1.8		
D-D	100	4½	4"	4 11/16	3"		3"	3		
	90	3.285	type	4.219	type		type	2.7	30,000	-
	80	2.92		3.75				2.4		
A	100	3 3/8	3½"	3 7/8	2 3/4"		2 3/4"	2 3/4		
	90	3.038	type	3.486	type		type	2.475	25,000	-
	80	2.7		3.1				2.2		
B	100	3 3/8	3½"	3½	2½"		2½"	2½		
	90	3.038	type	3.15	type		type	2.25	20,000	13,000
	80	2.7		2.8				2.0		
C	100	3 3/8	3½"	3 1/8	2½"		2½"	2½		
	90	3.038	type	2.813	type		type	2.025	10,000	10,000
	80	2.7		2.5				1.8		
D	100	3 3/8	3½"	2 13/16	2"		2"	2		
	90	3.038	type	2.531	type		type	1.8	13,000	6,000
	80	2.7		2.25				1.6		

1. A.H. measurements vary according to manufacturer, see DM-26
2. Assumes firm sand bottom
3. Assumes cast steel chain



D"	Single Link		Double Link		D"	Single Link		Double Link		D"	Single Link		Double Link	
	.90D	.80D	.90(2D)	.80(2D)		.90D	.80D	.90(2D)	.80(2D)		.90D	.80D	.90(2D)	.80(2D)
6-1/2	① 5.85	5.20	–	–	3-1/2	⑥ 3.15	2.80	⑮ 6.30	5.60	2	⑪ 1.80	1.60	㉒ 3.60	3.20
6	② 5.40	4.80	–	–	3	⑦ 2.70	2.40	⑯ 5.40	4.80	1-7/8	⑫ 1.69	1.50		
5-1/2	③ 4.95	4.40	–	–	2-3/4	⑧ 2.48	2.20	⑰ 4.96	4.40	1-3/4	⑬ 1.58	1.40	㉓ 3.06	2.80
4-1/2	④ 4.05	3.60	–	–	2-1/2	⑨ 2.25	2.00	⑱ 4.50	4.00	1-1/2	⑭ 1.35	1.20	㉔ 2.70	2.40
4	⑤ 3.60	3.20	⑲ 7.20	6.40	2-1/4	⑩ 2.03	1.80	㉑ 4.06	3.60	1-1/4	⑮ 1.125	1.00		

FIGURE A-2. 80/90 PERCENT "GO-NO-GO" GAUGES

ANNEX B

SAMPLE INSPECTION FORMS

Figures B-1 and B-2 are two forms the EIC and divers may use to record measurements and as-built summations.

FIGURE B-1

MOORING NO.: _____ CLASS: _____ LOCATION: _____ LAT: _____ LONG: _____

WATER DEPTH: _____ ANCHOR SIZE/TYPE: _____ BUOY TYPE: _____

BOTTOM TYPE: ☐ SAND ☐ MUD ☐ CLAY ☐ CORAL ☐ ROCK Visibility _____ D = depth NI = not inspected, inaccessible

COMPONENTS		NI	CONDITION								COMMENT
			NEW	SINGLE LINK %			DOUBLE LINK %			D	
				90+	80+	80-	90+	80+	80-		
BUOY HARDWARE											
RISER	NEAR BUOY										
	MIDDLE										
	NEAR GRD RG										
GROUND RING											
GROUND LEG NO. A	UPPER END										
	MIDDLE										
	ENTERS BOTTOM										
GROUND LEG NO. B	UPPER END										
	MIDDLE										
	ENTERS BOTTOM										
GROUND LEG NO. C	UPPER END										
	MIDDLE										
	ENTERS BOTTOM										
GROUND LEG NO. D	UPPER END										
	MIDDLE										
	ENTERS BOTTOM										

DATE: _____ ENGINEER-IN-CHARGE: _____ DIVERS: _____

FIGURE B-2

MOORING DATA SUMMARY FOR PREPARATION OF AS-BUILTS

MOORING# _____ CLASS _____ LOCATION _____ DATE _____

BOTTOM TYPE _____ WATER DEPTH _____ MOORING CONDITION _____

ENGINEER-IN-CHARGE _____ DIVERS _____

BUOY TYPE
- DIMENSIONS _____
- CONDITION _____
- TOP HARDWARE _____
- BOTTOM HARDWARE _____

RISER LENGTH
- TYPE CHAIN _____
- LINK WIDTH _____
- WIRE DIAM. _____

GROUND RING LOC.
- OUTER DIAM. _____
- WIRE DIAM. _____
- CONDITION _____

LEG A LENGTH
- EXPOSED LENGTH _____
- TYPE CHAIN _____
- LINK WIDTH _____
- WIRE DIAM. _____

LEG B LENGTH
- EXPOSED LENGTH _____
- TYPE CHAIN _____
- LINK WIDTH _____
- WIRE DIAM. _____

LEG C LENGTH
- EXPOSED LENGTH _____
- TYPE CHAIN _____
- LINK WIDTH _____
- WIRE DIAM. _____

LEG D LENGTH
- EXPOSED LENGTH _____
- TYPE CHAIN _____
- LINK WIDTH _____
- WIRE DIAM. _____

RISER CONNECTIONS _____

LEG CONNECTIONS _____

OTHER _____

ANNEX C

REFERENCES

PAGE	DTG: ORIGINATOR'S TIME			PRECEDENCE		CLASS	CRYPTO	IMP	CIC	TIME OF ORIGIN
	DATE TIME	MONTH	YR	ACT	INFO					
01 OF 02				RR		UUUU				1461827

DOOR — MESSAGE HANDLING INSTRUCTIONS

FROM: CHESNAVFACENGCOM WASHINGTON DC

TO: NAS SIGONELLA IT

INFO CINCUSNAVEUR LONDON UK

COMFAIRMED NAPLES IT

COMNAVFACENGCOM ALEXANDRIA VA

CINCLANTFLT NORFOLK VA

COMCBLANT NORFOLK VA

LANTNAVFACENGCOM NORFOLK VA

LANTNAVFACENGCOMBRO NAPLES IT

NAVSUPPACT NAPLES IT

UCT ONE

UNCLAS //N11000//

SUBJ: FLEET MOORING ISNPECTION OF AUGUSTA BAY, ITALY

1. AS PART OF THE COMNAVFACENGCOM FLEET MOORING MAINTENANCE (FMM) PROGRAM, CHESNAVFACENGCOM, WITH DIVER SUPPORT FROM UCT ONE, PLANS TO CONDUCT AN UNDERWATER INSPECTION OF THE ONE FLEET MOORING AT AUGUSTA BAY, ITALY.

2. AVAILABLE DATA INDICATES A SINGLE, FREE-SWINGING, RISER TYPE, CLASS CC MOORING FOR USE BY AD TYPE SHIPS. OUR RECORDS INCLUDE

6543210

DISTR:

DRAFTER TYPED NAME TITLE OFFICE SYMBOL PHONE
James E. McLaughlin
JAMES E. MCLAUGHLIN, FPO-1C7
26 MAY 1983 433-3881

SPECIAL INSTRUCTIONS
COPY TO: 09..00..FPO-1C..FPO-1C7..
FPO-10P2..FPO-1MP..DAILY..0161

RELEASER — TYPED NAME TITLE OFFICE SYMBOL AND PHONE
H. S. STEVENSON, CDR, CEC, USN

SIGNATURE

SECURITY CLASSIFICATION

DATE TIME GROUP
261936Z MAY 83

DD FORM 1 MAR 79 173/2 (OCR) PREVIOUS EDITION IS OBSOLETE S/N 0102 LF-000 1735 * U.S. GPO 1981 - 336-081 (2193 321

JOINT MESSAGE FORM

PAGE	DTG RELEASER TIME			PRECEDENCE		CLASS	SPECAT	EMP	CIC	CAT. MESSAGE
	DATE TIME	MONTH	YR	ACT	INFO					
02 OF 02				RR		UUUU				1261827

BOOK — MESSAGE HANDLING INSTRUCTIONS

LANTNAVFACENGCOM DRAWINGS NUMBERS - S1:4036288 AND S2:4036289 OF 31 AUGUST 1979.

3. REQUEST ADDITIONAL DATA ON MAINTENANCE HISTORY, RECORD OF OVERHAULS, SHIP UTILIZATION OR ANTICIPATED SHIP USAGE DURING INSPECTION PERIOD. NO CLASSIFIED MATERIAL REQUIRED. AREA AND FACILITY MAPS WITH SPECIFIC MOORING LOCATIONS ARE REQUESTED.

4. INSPECTION SCHEDULE IS 17-22 SEPTEMBER 1983. POINT OF CONTACT AT CHESNAVFACENGCOM IS J. MCLAUGHLIN, AUTOVON 288-3881 OR (202) 433-3881.

0123456

DISTR:

DRAFTER TYPED NAME, TITLE, OFFICE SYMBOL PHONE	SPECIAL INSTRUCTIONS	
RELEASER: TYPED NAME TITLE OFFICE SYMBOL AND PHONE		
SIGNATURE	SECURITY CLASSIFICATION	DATE TIME GROUP

DD FORM 1 MAR 79 173/2 (OCR) PREVIOUS EDITION IS OBSOLETE S/N 0102-LF-000 1735 * U.S. GPO 1981 - 335 081 [illegible]

UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU
U U N C L A S S I F I E D U
UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU

ROUTINE

R 200846Z JUN 83

FM NAS SIGONELLA IT

TO CHESNAVFACENGCOM WASHINGTON DC

INFO CINCUSNAVEUR LONDON UK
COMNAVFACENGCOM ALEXANDRIA VA
LANTNAVFACENGCOM NORFOLK VA
LANTNAVFACENGCOMBRD NAPLES IT
UCT ONE
COMFAIRMED NAPLES IT
CINCLANTFLT NORFOLK VA
COMCBLANT NORFOLK VA
NAVSUPPACT NAPLES IT

BT
UNCLAS //N11000//

SUBJ: FLEET MOORING INSPECTION OF AUGUSTA BAY, ITALY

A. CHESNAVFACENGCOM WASHINGTON DC 261936Z MAY 83

1. REF A ADVISED THAT CHESNAVFACENGCOM, WITH DIVER SUPPORT FROM UCT ONE, PLANS TO CONDUCT AN UNDERWATER INSPECTION OF THE ONE FLEET MOORING AT AUGUSTA BAY, ITALY AND REQUESTED ADDL DATA ON MAINTENANCE HISTORY, RECORD OF OVERHAULS, AND ANTICIPATED SHIP UTILIZATION DURING PROPOSED 17-22 SEP 83 INSPECTION PERIOD.

2. CONTRACT FOR INSTALLATION OF EXISTING AUGUSTA BAY A-3 MOORING WAS AWARDED IN SEP 79, MODIFIED IN SEP 80 TO INCLUDE RESTORATION OF 30 PIECES OF ANCHOR JOINING LINKS AND SEVERAL ADJUSTMENTS TO JOINING LINKS, AND COMPLETED IN NOV 80. THERE IS NO RECORD OF MAINTENANCE PERFORMED SINCE INSTALLATION AND NO SHIP UTILIZATION OF AUGUSTA BAY MOORING IS PLANNED DURING THE INSPECTION PERIOD. AREA AND FACILITY MAPS WITH SPECIFIC MOORING LOCATION HAVE NOT YET BEEN LOCATED. WILL BE PROVIDED WHEN AVAILABLE.
BT

DLVR:CHESNAVFACENGCOM WASHINGTON DC(9)...ACT

RTD:000-000/COPIES:0 9

011823/171 1 OF 1 41 0105 171/18:49Z 200846Z JUN
CSN:RX7Y00175 NAS SIGONELLA

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U U N C L A S S I F I E D U
UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU

END

FILMED

6-86

DTIC